

REMARKS

In the Office Action, claims 38-80 were rejected. By this amendment, claims 44, 50-51 and 61-80 have been canceled, and claims 38, 47, 52 and 58 have been amended. Thus, claims 38-43, 45-49 and 52-60 are pending. For the reasons set forth hereinbelow, Applicants request that the rejections associated with the pending claims be withdrawn.

§ 102 Rejections

Claims 38-39, 42-43 and 45-49

Independent claim 38 was rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,165,834 (Agarwal). Applicants have herein amended claim 38 to clarify that the first electrode is formed in a recess of the substrate assembly and extends above an uppermost surface of the substrate assembly. Applicants respectfully submit that amended claim 38, and claims 39, 42-43 and 45-49 which depend therefrom, are not anticipated by Agarwal. Accordingly, Applicants respectfully request that the § 102(e) rejections associated with these claims be withdrawn.

§ 103(a) Rejections

Claims 38-49

Independent claim 38 was also rejected under 35 U.S.C. § 103(a) as being obvious in view of Agarwal taken with U.S. Patent 5,866,453 (Prall). Applicants submit that amended claim 38 recites a combination of features neither taught nor suggested by the references of record, either alone or in combination, and that amended claim 38 is nonobvious over the references of record for at least this reason.

Independent claim 38 was also rejected under 35 U.S.C. § 103(a) as being obvious in view of U.S. Patent 6,222,722 (Fukuzumi) taken with Agarwal. Applicants agree with the Examiner's determination that Fukuzumi fails to disclose, teach or suggest forming the second electrode on the uppermost surface of the substrate assembly as recited in claim 38. However, Applicants respectfully disagree with the Examiner's assertion that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the capacitor of Fukuzumi by forming the second electrode on the dielectric and on the uppermost surface of the substrate assembly as shown by Agarwal because of the desirability to form a trench capacitor having a planar electrode structure and to eliminate the step formed by patterning the second electrode and dielectric." Applicants submit that even if the Examiner's assertion is taken as true, amended claim 38 would still be nonobvious over the references of record.

Independent claim 38 was also rejected under 35 U.S.C. § 103(a) as being obvious in view of U.S. Patent 5,478,772 (Fazan) taken with Agarwal and Fukuzumi. In the Office Action, the Examiner has asserted that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the capacitor of Fazan by forming the second electrode on the dielectric and on the uppermost surface of the substrate assembly as shown by Agarwal because of the desirability to form a trench capacitor having a planar electrode structure and to eliminate the step formed by patterning the second electrode and dielectric." Applicants respectfully disagree with this assertion and argue that even if taken as true, amended claim 38 would still be nonobvious over the references of record.

Applicants further submit that claims 39-43 and 45-49, which depend from amended claim 38, are also nonobvious over the references of record. *See* MPEP § 2143.03 (stating that if an

independent claim is nonobvious under § 103(a), then any claim depending therefrom is nonobvious).

Accordingly, for the reasons stated hereinabove, Applicants request that the § 103(a) rejections associated with claims 38-43 and 45-49 be withdrawn.

#### Claims 52-57

Independent claim 52 was rejected under 35 U.S.C. § 103(a) as being obvious over Fukuzumi taken with Agarwal. Applicants have herein amended independent claim 52 to clarify that the layer of hemispherical grain polysilicon is formed in a recess of a substrate assembly and the first electrode is formed on the hemispherical grain polysilicon (i.e., the first electrode is formed in the recess) and extends above an uppermost surface of the substrate assembly. Thus, for reasons similar to those set forth hereinabove with respect to amended claim 38, Applicants submit that amended claim 52 is nonobvious over the references of record. Applicants further submit that claims 53-57, which depend from amended claim 52, are also nonobvious over the references of record. *See* MPEP § 2143.03 *id.* Accordingly, Applicants request that the § 103(a) rejections associated with claims 52-57 be withdrawn.

#### Claims 58-60

Claims 58-60 were rejected under 35 U.S.C. § 103(a) as being obvious over Fukuzumi taken with Agarwal. Applicants have herein amended independent claim 58 to clarify that the layer of hemispherical grain polysilicon is formed in a recess of the substrate assembly and the first electrode is formed on the layer of hemispherical grain polysilicon (i.e., the first electrode is formed in the

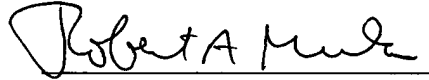
recess) and extends above an uppermost surface of the substrate assembly. Thus, for reasons similar to those set forth hereinabove with respect to amended claim 38, Applicants submit that amended claim 58 is nonobvious over the references of record. Applicants further submit that claims 59-60, which depend from amended claim 58, are also nonobvious over the cited references. *See* MPEP § 2143.03 *id.* Accordingly, Applicants request that the § 103(a) rejections associated with claims 58-60 be withdrawn.

CONCLUSION

Applicants respectfully request a Notice Of Allowance for the pending claims in the present application. If the Examiner is of the opinion that the present application is in condition for disposition other than allowance, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below in order that the Examiner's concerns may be expeditiously addressed.

Respectfully submitted,

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Robert A. Muha  
Reg. No. 44,249

KIRKPATRICK & LOCKHART, LLP  
Henry W. Oliver Building  
535 Smithfield Street  
Pittsburgh, Pennsylvania 15222

Telephone: (412) 355-8244  
Facsimile: (412) 355-6501  
E-mail: [rmuha@kl.com](mailto:rmuha@kl.com)